WEEKLY BULLETIN

CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

ESTABLISHED APRIL 15, 1870
BERTRAM P. BROWN, M.D., Director

Medical Library
APR 9 1942
University of California

STATE BOARD OF PUBLIC HEALTH

DR. A. ELMER BELT, President
Los Angeles

DR. F. M. POTTENGER, SR., Vice-President
Los Angeles

DR. BERTRAM P. BROWN, Executive Officer
Sacramento

DR. V. A. ROSSITER
Santa Ana

DR. NORMAN F. SPRAGUE
Los Angeles

DR. CHARLES E. SMITH
San Francisco

DR. JAMES F. RINEHART
San Francisco

ENTERED AS SECOND-CLASS MATTER FEB. 21, 1922, AT THE POST OFFICE AT SACRAMENTO, CALIFORNIA, UNDER THE ACT OF AUG. 24, 1912. ACCEPTANCE FOR MAILING AT THE SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCT. 3, 1917

SACRAMENTO, STATE OFFICE BLDG., 10TH AND L STS., 2-4711 SAN FRANCISCO, 603 PHELAN BLDG., 760 MARKET ST., UN 8700 LOS ANGELES, STATE OFFICE BLDG., 217 W. FIRST ST., MA 1271

VOL. XXI, No. 10 MARCH 28, 1942 GUY P. JONES Editor

A SURVEY OF TRICHINOSIS IN CALIFORNIA

A printed report of a survey of the trichinosis problem in California is about to be issued by the California State Department of Public Health. This survey was made jointly by the U. S. Public Health Service and the California State Department of Public Health. The work was done by Dr. K. B. Kerr, Zoologist of the National Institute of Health, and covered the period 1940-1941. All phases of the garbage problem in this State were covered and the results are of great value to health officers in the development of procedures for preventing the incidence of this preventable disease.

The report brings out the fact that the problem of trichinosis in California is no different from that in any other State. It is due, largely, to the practice of disposing of garbage from cities, towns, resorts and camps by feeding it to hogs in the condition in which it is collected. It was shown that an incidence of 6.4 per cent was found in more than 1,700 garbage fed swine examined for trichinae and such swine provide almost 50 per cent of the trichinous pork sold in California. Dr. Kerr's summary states:

"The examination of market pork products shows that fresh sausage is the most commonly infected product. A study of the distribution of such products revealed the fact that infected products were more common in areas where the incidence was highest in the garbage fed swine. It would thus appear that the two incidences are related.

"The case rate distribution apparently reflects the incidence found in market pork products, which, in turn, is related to the incidence among the garbage fed swine. It thus appears that the number of cases of trichinosis in an area may be a direct reflection of the incidence in garbage fed swine.

"The practice of cooking garbage from municipalities before feeding it to swine is being successfully carried out in England, Canada and certain parts of the United States. Since this practice under proper supervision would eliminate nearly 50 per cent of the trichinous pork sold annually on the California markets, it appears that its institution would materially lessen the trichinosis problem without seriously disrupting the present methods of garbage disposal.

"The data collected by the survey show that as far as California raised swine are concerned, the chief problem in the control of trichinosis lies in the practice of disposing of raw garbage by feeding it to swine. Elimination of this practice would not eliminate the problem of trichinosis, but it would materially reduce the amount of infected pork products sold in this State.

It is pointed out that there were 1,650,000 head of swine slaughtered annually in California, and that 650,000 of these were raised in the State. All data indicate that there are 250,000 garbage fed swine in California. The incidence for these swine, 6.4 per cent, indicates that there would be 16,000 head infected with trichinae. An incidence of 0.8 per cent was found in nongarbage fed swine; therefore, 3,200 head of the 400,000 nongarbage fed swine would be infected. Schwartz, in discussing the role of garbage fed swine in trichinosis assumes that 10 per cent of the swine raised in the United States are fed in part or entirely on garbage. He found 5.7 per cent of the garbage fed swine infected. Based on Schwartz's assumption and incidence, 100,000 of the 1,000,000 head of non-California swine would be garbage fed, or 5,700 infected head. Again, Schwartz found that 1.0 per cent of the nongarbage fed swine infected. Thus, 9,000 of the 900,000 head of non-California grain fed swine would be infected. This would indicate a total of 33,900 head of infected swine slaughtered annually in California. At least 47 per cent of this total would have been raised on garbage in California. It would seem, therefore, that the elimination of this practice in California would reduce the amount of trichinous pork sold by nearly 50 per cent.

"To state the matter in another way, if we assume that the average dressed hog carcass weighs 150 pounds, than about 5,000,000 of the 247,000,000 pounds of pork produced annually in California would be infected. The removal of infection from California garbage fed swine would almost cut this amount in half. Such a procedure would be a considerable advance in the control of trichinosis.

"A good deal of thought and effort have been expended on ways and means of determining the trichina infected hog carcass in the slaughterhouse. To date, all methods developed have been uneconomical or impractical because they are not sufficiently accurate. The microscopic inspection of each carcass is too expensive and does not detect all infections. The skin testing of hogs with trichina intradermal antigen is not only laborious but also not sufficiently accurate according to the report of Spindler, Cross and Avery. It has been suggested that each hog carcass might be rendered safe by freezing. This would not be practical from the standpoint of economics.

"The question of the methods of disposing of garbage arises. In addition to the practice of feeding it to swine, the following methods are in use: fill and cover, dumping at sea, grinding and discharging into sewers, incineration, reduction, and cooking the garbage before feeding it to swine. All of these methods except reduction and feeding the garbage to swine treat the material as a valueless product. It must be recognized that garbage has value.

"The fill and cover method is practical particularly where waste lands are conveniently available. Even where waste lands were not available, the city of Fresno has worked out a very satisfactory method at a nominal cost for disposing of household noncombustible refuse which is mixed with garbage.

"Dumping at sea is not particularly practical on the California coast because the prevailing currents sweep a great deal of the refuse back on the beaches, thus creating a nuisance. The method is used by certain cities for disposing of household garbage and noncombustible refuse.

"The grinding and discharge of garbage into sewers effectively disposes of garbage, but its general use would cause the overhauling and rebuilding of many sewage plants. The increased amount of bulk in the sewage would call for increased sewage plant capacity.

"Incineration is in use in various places. To handle restaurant or so-called wet garbage in these plants is an expensive process because of the fuel required to dispose of the water in the garbage.

"Reduction of the garbage for grease recovers some of the value of the garbage. The use of the process is frequently affected by the price of grease, for when the price of that product falls below the operating costs of the plant there is a temptation to dispose of the garbage by other means.

"Judging from the experience in England, Canada, and several sections of the United States, the cooking of garbage before feeding it to hogs is a practical and economical means of disposing of this refuse. Unfortunately, many of the California hog feeders are prejudiced against cooking of the garbage because of an experience of the largest of them. This experience involved an attempt to save several days accumulation of garbage from a large urban center during a period of interruption of transportation facilities. In this case the garbage was thoroughly cooked on gondola cars before being transported. It remained in these cars for 48 or more hours and was still warm when unloaded. Under such circumstances, most of the food value would have been destroyed by the long cooking period.

"It would be desirable to have available plans and costs of operating garbage cookers. However, such information is almost nonexistent. The Canadian Department of Agriculture furnishes hog raisers a plan for building a type of cooker which is both economical and effective for small amounts of garbage. Information concerning methods of handling and cooking the tonnage of garbage originating in such cities as Los Angeles and San Francisco does not seem to be available.

"From the standpoint of agriculture and swine sanitation the feeding of raw garbage is not considered good practice. The losses of swine on such ranches are greater than they are on grain feeding ranches due to the diseases which are transmitted through the garbage. In California, the most important of these diseases are vesicular exanthema and hog cholera. The attitude of the State Department of Agriculture is reflected in a mimeographed release which indicates that the cooperation of the department is available for any efforts to eliminate the practice.

"In conclusion, it appears that the least disruption of present methods of garbage disposal would be to require the cooking of the garbage before it is fed to swine. In most cases this would not require a large capital on the part of the rancher nor would it materially increase the cost to the municipality for disposing of its garbage. Municipalities could not then be accused of contributing to this public health problem."

"Young men, have confidence in those powerful and sane methods of which we do not as yet know all the secrets. And whatever your career may be do not let yourselves become tainted by a depreciating and barren skepticism. Do not let yourselves be discouraged by the sadness of certain hours which pass over nations. Live in the serene peace of laboratories and libraries. Say to yourselves first: 'What have I done for my instruction?'—and as you gradually advance, 'What have I done for my country?' Until the time comes when you may have the immense happiness of thinking that you have contributed in some way to the progress and good of humanity."—Words of Louis Pasteur, December 27, 1892, on the occasion of his 70th birthday.

FEES FOR CENSUS BUREAU SEARCHES

Reference was made in an article entitled, "What To Do If You Have No Birth Certificate," published in the February 14th issue of the Weekly Bulletin, to searches of the Census Bureau records covering the material gathered decenially by the U. S. Bureau of the Census. It was stated that special forms must be used for the purpose. Through an oversight, it was not mentioned that the Census Bureau requires a fee of $3 for making such a search of the records, requests to be made upon the Census Bureau application form and accompanied by the fee. Such requests are given priority.

REVISED LIST OF REPORTABLE DISEASES

Reportable Only:

Anthrax
Botulism—if commercial product notify State Department of Health at once.
Coccidioidal Granuloma
Dengue—keep patient in mosquito-free room.
Epilepsy
Food Poisoning
Glanders—report by phone or telegraph.
Jaundice—infectious or epidemic types.
Malaria—keep patient in mosquito-free room.
Pneumonia—specify type of pneumococcus, if known.
Relapsing Fever
Rheumatic Fever
Rocky Mountain Spotted Fever
Tetanus
Trichinosis
Tularemia
Undulant Fever

Reportable and Subject to Isolation:

Epidemic diarrhea of the newborn (in institutions)
Chickenpox
Dysentery—Amoebic
Dysentery—Bacillary—specify type, if known.
German Measles
Influenza
Measles
Mumps
Ophthalmia Neonatorum
Psittacosis
Rabies—in animals. Use special card.
Rabies—in humans.
Septic Sore Throat (in epidemic form).
Trachoma
Tuberculosis—use special card.
Whooping Cough
Syphilis—use special card.
Gonorrhea—use special card.
Chancroid—use special card.
Lymphopathia Venereum—use special card.
Granuloma—Inguinale—use special card.

Reportable and Subject to Quarantine and Placarding:

Cholera—report by telephone or telegraph to State Department of Health.
Diphtheria
Encephalitis (Infectious)—specify type, if known.

NOTE: This means all forms of acute encephalitis such as St. Louis type, equine type, and any other epidemic form occurring in California.

Leprosy
Meningitis (due to the meningococcus).
Paratyphoid Fever—specify type A or B.
Plague—report by telephone or telegraph to State Department of Health.
Acute Anterior Poliomyelitis
Scarlet Fever
Smallpox
Typhoid Fever
Typhus Fever
Yellow Fever—report by telephone or telegraph to State Department of Health.

Few things are more important to a community than the health of its women. If strong is the frame of the mother, says a proverb, the son will give laws to the people. And in nations where all men give laws, all men need mothers of strong frames.—*T. W. Higginson.*

MORBIDITY*

Complete Reports for Certain Diseases Recorded for Week Ending March 21, 1942

Chickenpox

1558 cases from the following counties: Alameda 217, Amador 4, Butte 1, Calaveras 3, Contra Costa 7, Fresno 78, Imperial, 5, Inyo 1, Kern 54, Kings 5, Los Angeles 623, Merced 4, Monterey 5, Nevada 2, Orange 38, Plumas 2, Riverside 13, Sacramento 34, San Bernardino 120, San Diego 139, San Francisco 59, San Luis Obispo 2, San Mateo 16, Santa Barbara 32, Santa Clara 47, Shasta 1, Siskiyou 15, Sonoma 4, Tulare 5, Tuolumne 1, Ventura 12, Yolo 9.

German Measles

1365 cases from the following counties: Alameda 237, Butte 1, Contra Costa 1, Fresno 10, Kern 40, Los Angeles 134, Marin 11, Merced 30, Monterey 4, Orange 20, Placer 1, Plumas 4, Riverside 34, Sacramento 7, San Benito 1, San Diego 388, San Francisco 134, San Joaquin 88, San Luis Obispo 18, San Mateo 27, Santa Barbara 23, Santa Clara 38, Santa Cruz 2, Solano 5, Sonoma 17, Stanislaus 27, Sutter 1, Tehama 1, Tulare 54, Ventura 3, Yolo 4.

Measles

5609 cases from the following counties: Alameda 336, Amador 24, Butte 164, Calaveras 8, Colusa 3, Contra Costa 37, Del Norte 3, Eldorado 10, Fresno 376, Humboldt 4, Imperial 81, Kern 86, Kings 25, Los Angeles 1885, Madera 156, Marin 14, Mariposa 6, Mendocino 1, Merced 143, Monterey 9, Napa 3, Nevada 1, Orange 449, Riverside 53, Sacramento 193, San Bernardino 82, San Diego 468, San Francisco 36, San Joaquin 197, San Luis Obispo 70, San Mateo 7, Santa Barbara 222, Santa Clara 36, Santa Cruz 10, Shasta 8, Siskiyou 4, Solano 53, Sonoma 64, Stanislaus 48, Sutter 31, Tehama 11, Tulare 49, Tuolumne 8, Ventura 60, Yolo 66, Yuba 8, California 1.**

Mumps

2568 cases from the following counties: Alameda 273, Butte 7, Contra Costa 20, Del Norte 26, Fresno 47, Imperial 215, Inyo 1, Kern 55, Kings 8, Los Angeles 568, Madera 45, Marin 12, Merced 5, Monterey 27, Orange 100, Plumas 4, Riverside 40, Sacramento 137, San Bernardino 286, San Diego 272, San Francisco 5, San Joaquin 58, San Luis Obispo 24, San Mateo 60, Santa Barbara 34, Santa Clara 64, Santa Cruz 25, Shasta 12, Siskiyou 13, Solano 5, Sonoma 47, Stanislaus 5, Sutter 5, Tehama 21, Tulare 19, Ventura 8, Yolo 15.

Scarlet Fever

142 cases from the following counties: Alameda 5, Butte 1, Contra Costa 1, Fresno 4, Kern 1, Kings 4, Lake 2, Los Angeles 47, Marin 5, Merced 6, Riverside 6, Sacramento 2, San Bernardino 7, San Diego 15, San Francisco 9, San Joaquin 10, San Luis Obispo 6, Santa Clara 6, Shasta 1, Solano 2, Sonoma 1, Tulare 1.

Whooping Cough

324 cases from the following counties: Alameda 35, Contra Costa 1, Fresno 26, Humboldt 4, Kern 7, Kings 21, Los Angeles 60, Madera 5, Mendocino 7, Merced 3, Orange 13, Plumas 2, Riverside 1, Sacramento 9, San Bernardino 16, San Diego 19, San Joaquin 15, San Luis Obispo 3, San Mateo 1, Santa Barbara 30, Santa Clara 12, Santa Cruz 3, Sonoma 13, Stanislaus 1, Tulare 14, Yolo 3.

Coccidioidal Granuloma

One case from San Joaquin County.

Diarrhea of Newborn (Epidemic)

One case from Los Angeles County.

Diphtheria

17 cases from the following counties: Alameda 1, Calaveras 1, Imperial 1, Los Angeles 2, Sacramento 2, San Bernardino 1, San Luis Obispo 1, Sonoma 5, Yolo 3.

Dysentery (Bacillary)

6 cases from the following counties: Los Angeles 5, Sonoma 1.

Encephalitis (Epidemic)

3 cases from the following counties: Kings 1, San Francisco 1, San Joaquin 1.

Epilepsy

49 cases from the following counties: Alameda 1, Kern 1, Los Angeles 34, Mendocino 2, Riverside 1, San Francisco 1, San Joaquin 2, San Mateo 3, Sonoma 4.

Food Poisoning

6 cases from the following counties: Los Angeles 5, Orange 1.

Influenza

221 cases reported in the State.

Jaundice (Epidemic)

One case from Tulare County.

Malaria

2 cases from the following counties: Fresno 1, Santa Barbara 1.

Meningitis (Epidemic)

2 cases from the following counties: Kern 1, San Diego 1.

Paratyphoid Fever

One case from Los Angeles.

Poliomyelitis

3 cases from the following counties: Orange 2, Santa Barbara 1.

Rabies (Animal)

19 cases from the following counties: Fresno 5, Los Angeles 11, San Diego 3.

Rheumatic Fever

5 cases from the following counties: Alameda 1, Los Angeles 1, Madera 1, San Bernardino 1, San Francisco 1.

Septic Sore Throat

7 cases from the following counties: San Joaquin 1, Santa Clara 6.

Tetanus

2 cases from the following counties: Los Angeles 1, San Francisco 1.

Typhoid Fever

6 cases from the following counties: Fresno 1, Imperial 1, Riverside 2, San Diego 1, Stanislaus 1.

Undulant Fever

7 cases from the following counties: Los Angeles 4, Orange 1, San Diego 2.

We believe it to be the duty of every citizen to do all within his power to improve the conditions under which men work and live. We believe that that man renders the greatest social service who so cooperates in the organization of industry as to afford to the largest number of men the greatest opportunity for self-development and the enjoyment by every man of those benefits which his own work adds to the wealth of civilization.—*John D. Rockefeller, Jr.*

---

* Data regarding the other reportable diseases not listed herein, may be obtained upon request.

** Cases charged to "California" represent patients ill before entering the State or those who contracted their illness traveling about the State throughout the incubation period of the disease. These cases are not chargeable to any one locality.

University of California
Medical Library,
3rd & Parnassus Aves.,
San Francisco, Calif.

printed in CALIFORNIA STATE PRINTING OFFICE
SACRAMENTO, 1942 GEORGE H. MOORE, STATE PRINTER 8800 3-42 7500